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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,444	01/12/2004	Balaji Vembu	42P18507	2132

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EXAMINER

PERUNGAVOOR, VENKATANARAY

ART UNIT	PAPER NUMBER
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2132

MAIL DATE	DELIVERY MODE
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07/03/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/756,444	Applicant(s) VEMBU, BALAJI	
	Examiner Venkat Perungavoor	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 1-5,7-13, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 7142676 to Hillier et al.(hereinafter Hillier) in view of US Patent 6336121 to Lyson et al.(hereinafter Lyson) further in view of US Patent 6256733 to Thakkar et al.(hereinafter Thakkar).
3. Regarding Claim 1, 10, Hillier discloses the first entity(originator processor) having associated with a key(KS1) , second entity(recipient processor) associated with a key(2ndEPuK) and third entity(third party processor) associated with a key(3rdEPuK) see Fig. 1 & Col 5 Ln 41- Col 6 Ln 13; decrypting of keys(KS2, KS, KS1) using third party's private keys see Col 6 Ln 3-13 & Col 7 Ln 5-20. But fails to explicitly disclose the encrypting the first key by the second key and another entity obtaining this key and further decrypting the first key encrypted by second key. However, Lyson discloses the re-encrypting the captured data and further of a requesting entity decrypting the encrypted key to obtain key see Fig. 3 item 70, 72, 74 & Col 5 Ln 40-51 & Col 6 Ln 19-23. It would be obvious to one having ordinary skill in the art at the time of the invention to include the re-encrypting of captured data and decrypting to obtain key in the invention of Hillier in order to have a

reduced number of keys as taught in Lyson see Col 2 Ln 39-44. Neither Hillier nor Lyson explicitly disclose the encrypting of keys using the public key of an entity. However, Thakkar discloses the encrypting of keys using the public key see Col 1 Ln 37-53. It would be obvious to one having ordinary skill in the art at the time of the invention to include the use of encrypting key using public keys in the invention of Hillier in order to provide for signature verification using publicly available data as taught in Thakkar see Col 1 Ln 36-46.

4. Regarding Claim 2, 16, Hillier discloses direct communication between originator and recipient after connection see Col 4 Ln 23-27.
5. Regarding Claim 3-4, 11-12, Hillier discloses the processor, which includes an graphics device and application program see Fig. 1 item 12, 14.
6. Regarding Claim 5, 13, Hillier discloses the trust third party see Col 2 Ln 16-20.
7. Claims 6, 14-15, 17, 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 7142676 to Hillier et al.(hereinafter Hillier) in view of US Patent 6336121 to Lyson et al.(hereinafter Lyson) further in view of US Patent 2003/0194093 to Evans et al.(hereinafter Evans).
8. Regarding Claim 6, 15, Hillier nor Lyson explicitly disclose the pseudo-randomly generated keys. However, Evans discloses the pseudo-randomly generated keys see Par. 0067. It would be obvious to one having ordinary skill in the art at the time of the invention to include the

pseudo-randomly generated keys in the invention of Hillier in order to have key that is never revealed as taught in Evans see Par. 0067 & Par. 0068.

9. Regarding Claim 14, 17, 20, Hillier nor Lyson explicitly disclose registers for storing keys or input/output pin dedicated to use by first entity. However, Evans discloses the registers for storing keys see Par. 0028 and input/output pin dedicated to use by first entity see Par. 0031 & Par. 0029. It would be obvious to one having ordinary skill in the art at the time of the invention to include registers in the invention of Hillier in order to have a unit for storing keys as taught in Evans see Par. 0029.
10. Claims 18-19, 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 7142676 to Hillier et al.(hereinafter Hillier) in view of US Patent 6336121 to Lyson et al.(hereinafter Lyson) further in view of US Patent 6256733 to Thakkar et al.(hereinafter Thakkar) further in view of US Patent 2003/0194093 to Evans et al.(hereinafter Evans).
11. Regarding Claim 18, Hillier discloses the first entity(originator processor) having associated with a key(KS1) , second entity(recipient processor) associated with a key(2ndEPuK) and third entity(third party processor) associated with a key(3rdEPuK) see Fig. 1 & Col 5 Ln 41- Col 6 Ln 13; decrypting of keys(KS2, KS, KS1) using third party's private keys see Col 6 Ln 3-13 & Col 7 Ln 5-20. But fails to explicitly disclose the encrypting the first key by the second key and another entity obtaining this key and further decrypting the first key encrypted by second key. However, Lyson discloses the re-encrypting the captured data and further of a requesting entity decrypting the encrypted key to obtain key see Fig. 3 item 70,

72, 74 & Col 5 Ln 40-51 & Col 6 Ln 19-23. It would be obvious to one having ordinary skill in the art at the time of the invention to include the re-encrypting of captured data and decrypting to obtain key in the invention of Hillier in order to have a reduced number of keys as taught in Lyson see Col 2 Ln 39-44. Neither Hillier nor Lyson explicitly disclose the encrypting of keys using the public key of an entity. However, Thakkar discloses the encrypting of keys using the public key see Col 1 Ln 37-53. It would be obvious to one having ordinary skill in the art at the time of the invention to include the use of encrypting key using public keys in the invention of Hillier in order to provide for signature verification using publicly available data as taught in Thakkar see Col 1 Ln 36-46. Further yet, Hillier nor Lyson nor Thakkar explicitly disclose the pseudo-randomly generated keys. However, Evans discloses the pseudo-randomly generated keys see Par. 0067. It would be obvious to one having ordinary skill in the art at the time of the invention to include the pseudo-randomly generated keys in the invention of Hillier in order to have key that is never revealed as taught in Evans see Par. 0067 & Par. 0068. Further, Hillier nor Lyson explicitly disclose registers for storing keys or input/output pin dedicated to use by first entity. However, Evans discloses the registers for storing keys see Par. 0028 and input/output pin dedicated to use by first entity see Par. 0031 & Par. 0029. It would be obvious to one having ordinary skill in the art at the time of the invention to include registers in the invention of Hiller in order to have a unit for storing keys as taught in Evans see Par. 0029.

12. Regarding Claim 19, Hillier discloses the signal the start of key exchange see Fig. 3a item 42.

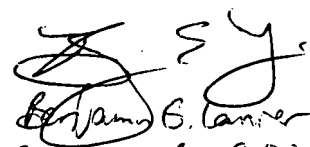
13. Regarding Claim 21, Hillier discloses the decrypting the encrypted content see Fig. 4 item 55.

*Conclusion*

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Venkat Perungavoor whose telephone number is 571-272-7213. The examiner can normally be reached on 8:30-5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VP/  
Venkat Perungavoor  
Examiner  
Art Unit 2132  
June 14, 2007

  
Benjamin G. Barron  
Examiner Art. 2132